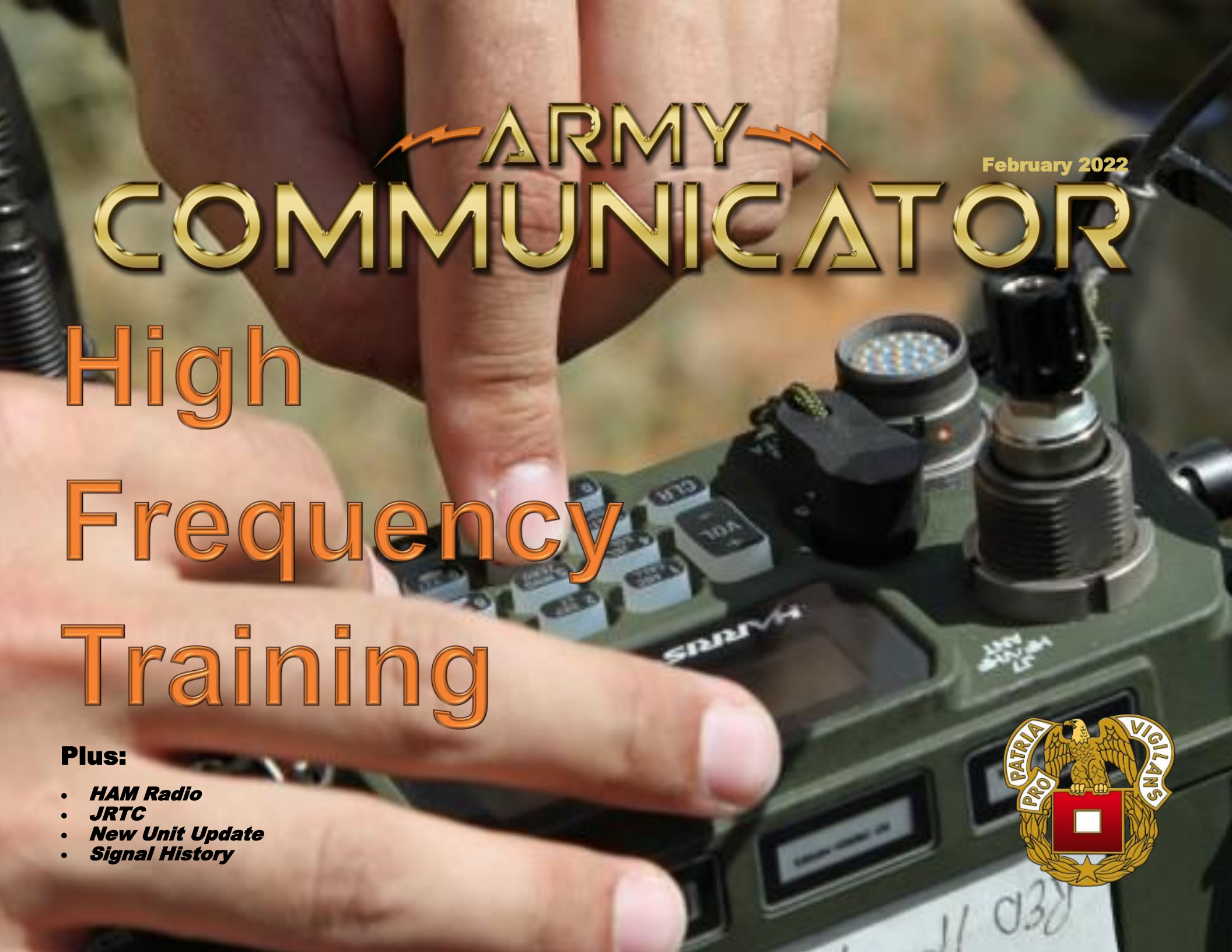


ARMY COMMUNICATOR

February 2022

High Frequency Training

Plus:

- ***HAM Radio***
- ***JRTC***
- ***New Unit Update***
- ***Signal History***

Contents

The Army Communicator is published as a command information e-publication for the men and women of the United States Army Signal Corps under the provisions of AR 360-1.

Opinions expressed herein do not necessarily reflect the views of Office, Chief of Signal, the US Army or the Department of Defense.

Submit articles, photos, graphics, videos, story ideas, and nominations for "Signal Spotlight" to the editor here. For additional information, please call (706) 791-7384.
Follow the Signal Regiment on Facebook here.
Follow the Signal School Commandant on Twitter here.

COL James D. Turinetti IV
Signal School Commandant

CSM Darien D. Lawshea
Signal Corps Regimental Command Sergeant Major

CW5 Chris R. Westbrook
Signal Corps Regimental Chief Warrant Officer

MAJ Ryan M. Gray
Editor

On the Cover
NETCOM's High Frequency (HF) technical assistance labs provide training on a variety of HF subject areas, tailored to the attending unit's mission needs and training shortfalls. One of the main takeaways of the labs provides Signal Soldiers a more thorough understanding of how to program their radios. They should also leave with a more in-depth understanding of how HF signal propagate. (Photo by Gordon Van Vleet)

Team Signal,

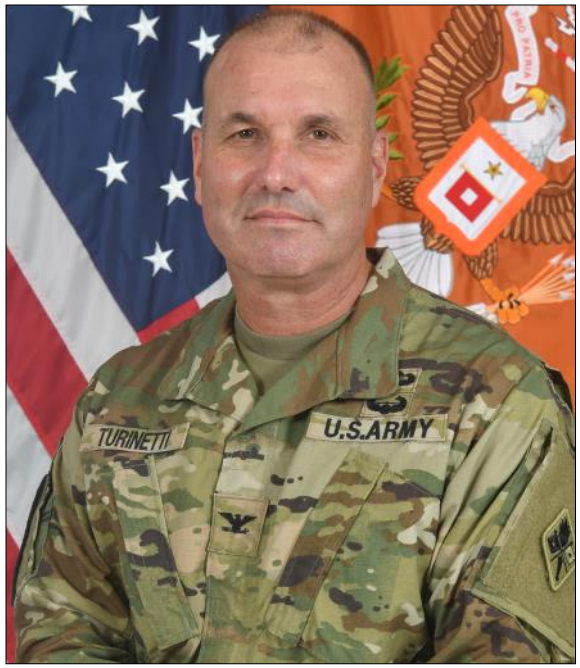
I remember being told once that working in the communications field is a lot like working in medicine. You complete your schooling and begin a career in your field. But advancements in methodology happen so frequently, that your education is never truly complete; and if you don't keep up with the latest technology and techniques, you'll not only be left behind, you could potentially put others at risk. This is why we must never fall into the thinking that we know all there is to know, and always make training a top priority.

This issue of the *Communicator* puts a lot of focus on training, but not just on new techniques. Every piece of equipment we use has a foundation, and sometimes, it's a good idea to go back to the basics and learn more about some of our earliest tools. You'll be surprised, I think, by how much they're still relevant today.

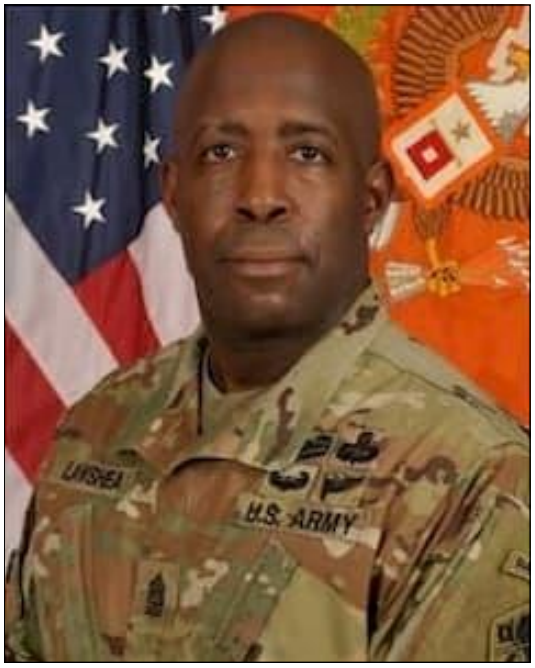
No conversation about training would be complete without discussing one of the most important aspects: passing along what you've learned. There are numerous opportunities for Signaleers to serve training the next generation of Soldiers, and if you have the opportunity to do so, I highly encourage it.

As always, thank you for all you do for the Regiment.

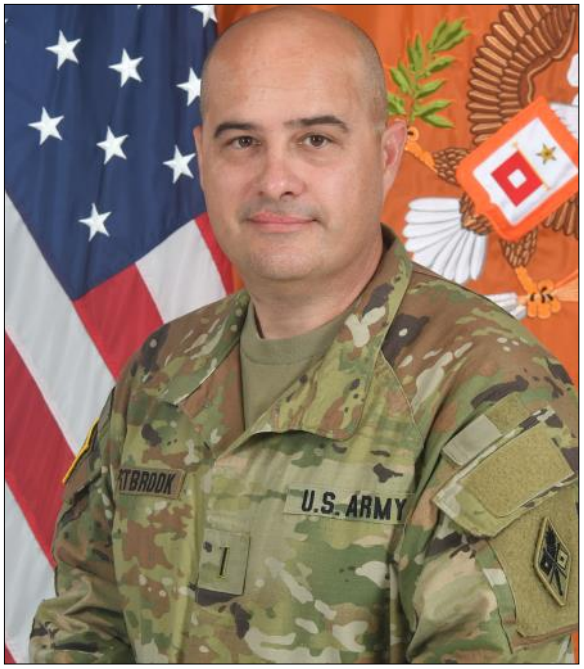
Pro Patria Vigilans!



COL James Turinetti IV
Signal School Commandant



CSM Darien Lawshea
Regimental CSM



CW5 Chris Westbrook
Regimental CWO

NETCOM offers training for a timeless technology: High Frequency (HF) radio communications

Enrique Tamez Vasquez
NETCOM Public Affairs Office

More than a century after Guglielmo Marconi helped pioneer trans-Atlantic communications, High Frequency (HF) has continued to be a consistent, economical and reliable long-range communications platform; being of practical use in natural disasters, as well as, for military applications.
Graphical representation by Enrique Tamez Vasquez

More than a century after Guglielmo Marconi helped pioneer trans-Atlantic communications, High Frequency (HF) has continued to be a consistent, economical and reliable long-range communications platform; being of practical use in natural disasters, as well as, for military applications.

The critical importance of modern HF communications can perhaps be best exemplified by the wireless Marconi distress call CQD meaning, "All stations distress" and the newly adopted SOS signals transmitted by the R.M.S. Titanic on the night of April 14 and morning of April 15, 1912 after the ship struck an iceberg in the North Atlantic.

While the communication events surrounding the Titanic disaster helped generate interest in HF radio governance and radio-relay station expansion, the use of HF after World War II slowly became a dying art with the invention of satellite, tropospheric scatter, Line-of-Sight (LOS) microwave and fiber optic technologies.

In retrospect, the Network Enterprise Technology Command's (NETCOM's) HF Capability Manager Paul English said that HF communications is no longer a vanishing art, as it is now making a resurgence in communications planning.

"Increased vulnerabilities to cyber and satellite communications coupled with increasing HF communications capability and capacity is making the Services rethink their Primary, Alternate, Contingency, and Emergency, or PACE, communications planning," English said.

According to Eric E. Johnson, Ph.D., PE, in his recent AFCEA *Signal Magazine* article titled *Wideband Steps Up to Fill the Gap*, the military's need for contingency communications continues to grow exponentially.

"Concerns are growing about warfighters' ability to communicate mission-critical information beyond line-of-sight in conflicts with peer and near-peer adversaries," Johnson wrote. "Just in time, a new generation of highly capable high frequency radios is emerging as a viable solution when satellite communications are denied or unavailable."

The advantage of HF communications is that it does not rely on any other infrastructure other than the radio equipment on either end of the link, English said.

According to English, both civilian and military communications networks benefit from HF technologies as the radio platform is used in a myriad of situations from natural disasters to military command and control. For instance, on the civilian side, HF communications is heavily used by amateur radio operators for voice, as well as, a plethora of digital communication protocols.

On the federal side, agencies such as the Federal Aviation Administration (FAA) use HF for over the ocean communications for air traffic control, and the National Oceanic and Atmospheric Administration (NOAA), National Data Buoy Center (NDBC) uses HF radar to measure ocean currents on both the east and west coasts.

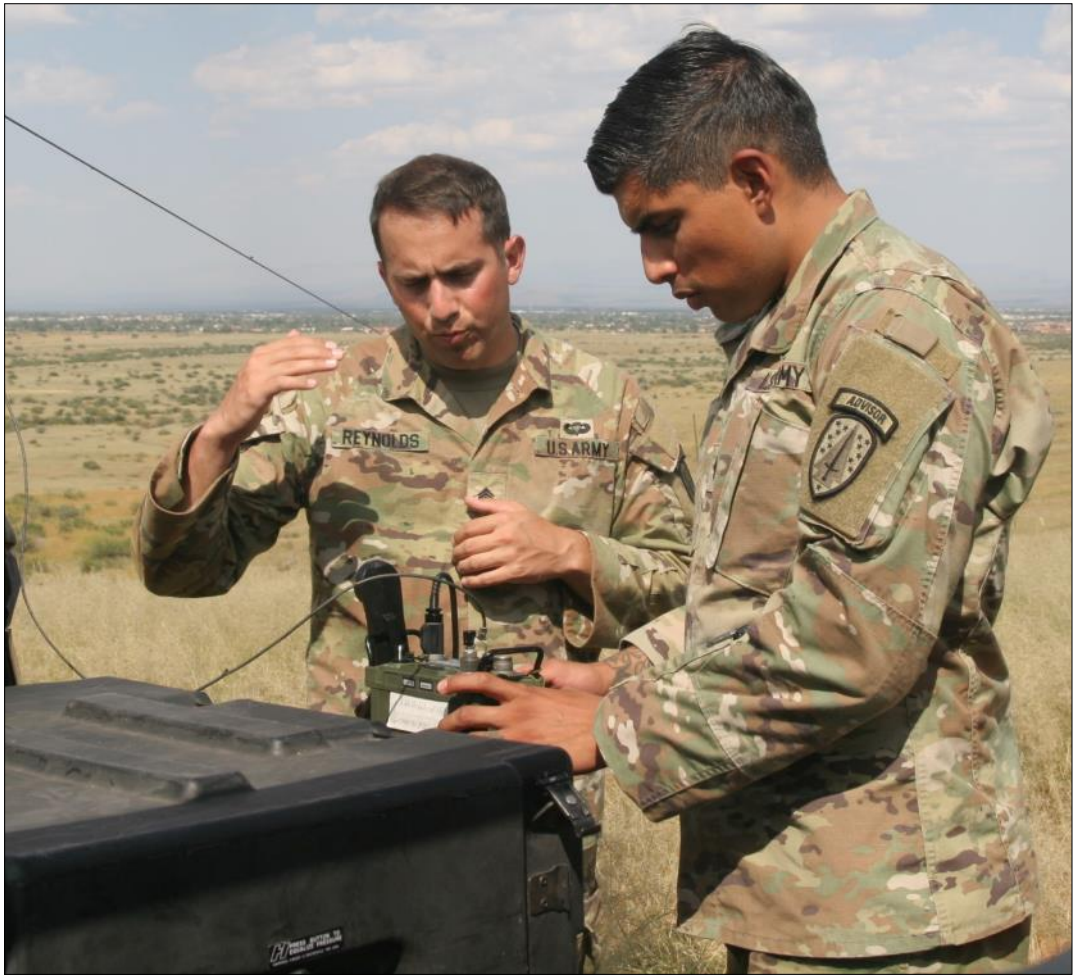
HF has become a critical PACE platform during natural disasters, extensively used during a number of natural disasters, to include the 2010 Haiti earthquake, the Nepal earthquake in 2015, and the recent 2018 earthquake in Puerto Rico. HF communication nets are activated throughout the June-November hurricane season to track and report hurricane conditions in and around affected areas, as was done most recently during hurricanes Henri and Ida.

Similarly, HF continues to be a viable PACE conduit within military communications infrastructure.

"In the military, HF communications is used as a basic long-range command and control medium for communications between Headquarters (HQ's) in all services," English said. "For example, the U.S. Army's field artillery units use HF for the fire direction centers to send firing instructions to the rocket launchers. The Air Force and Navy use HF communications for long range command and control of aircraft and ships."

"The Air Force also uses HF as a means for pilots to place telephone calls using the High Frequency Global Communications System (HF-GCS)," English said. "The Military Auxiliary Radio System (MARS) and Civil Air Patrol (CAP) also extensively use HF communications in support of the Department of Defense."

Likewise, in January 2020, U.S. Marines set up and tested equipment during a high frequency (HF) training event between Camp Pendleton, California, and Camp Schwab, Okinawa, Japan.

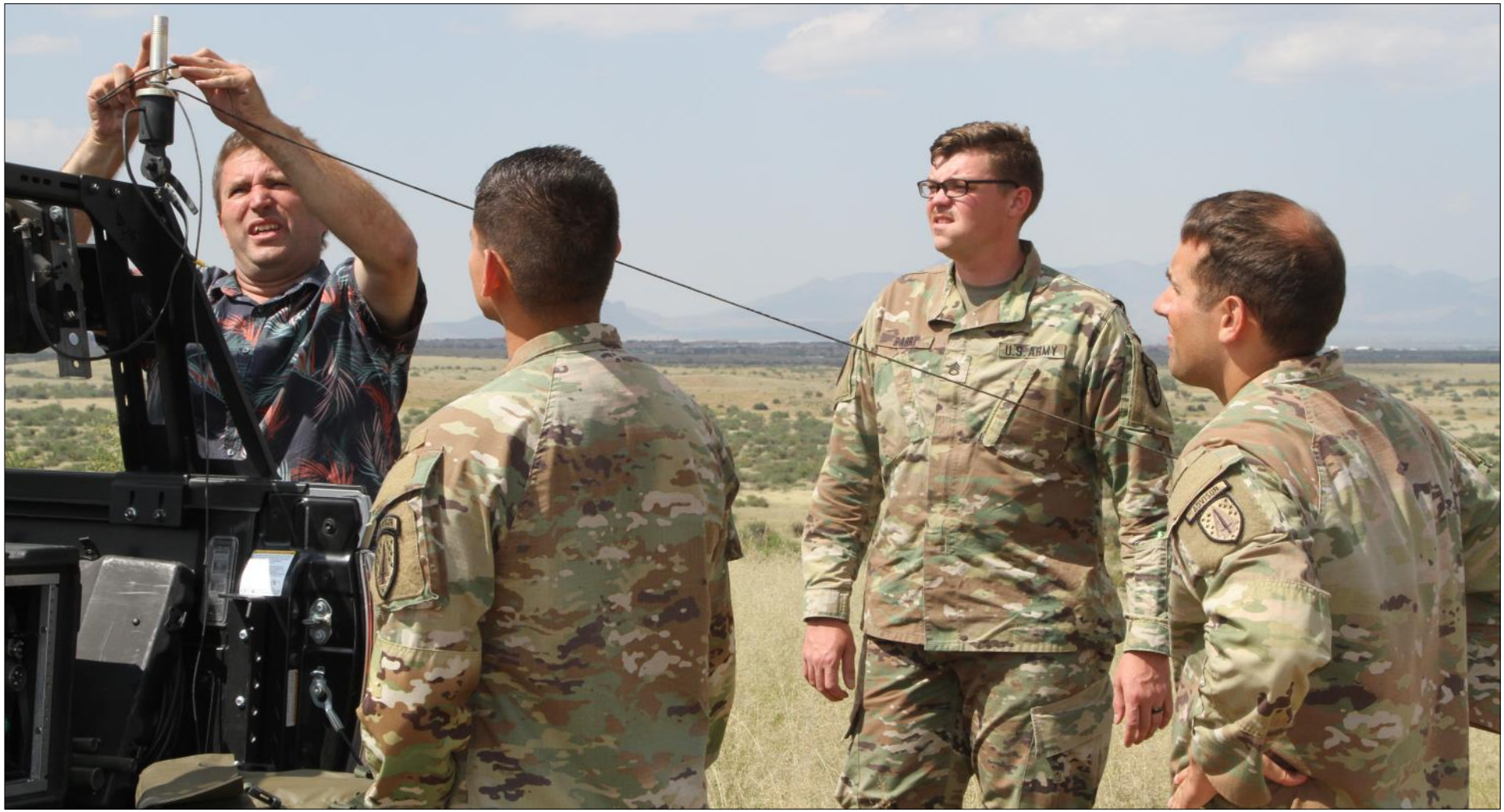


Sgt. Jeremy Reynolds (left) and Staff Sgt. Carlos Lopez (right) assigned to the 4th Security Force Assistance Brigade (4SFAB) based at Fort Carson Colorado, set up a field-expedient HF radio and antenna array within the confines of the Fort Huachuca, training area.
Photo by Enrique Tamez Vasquez

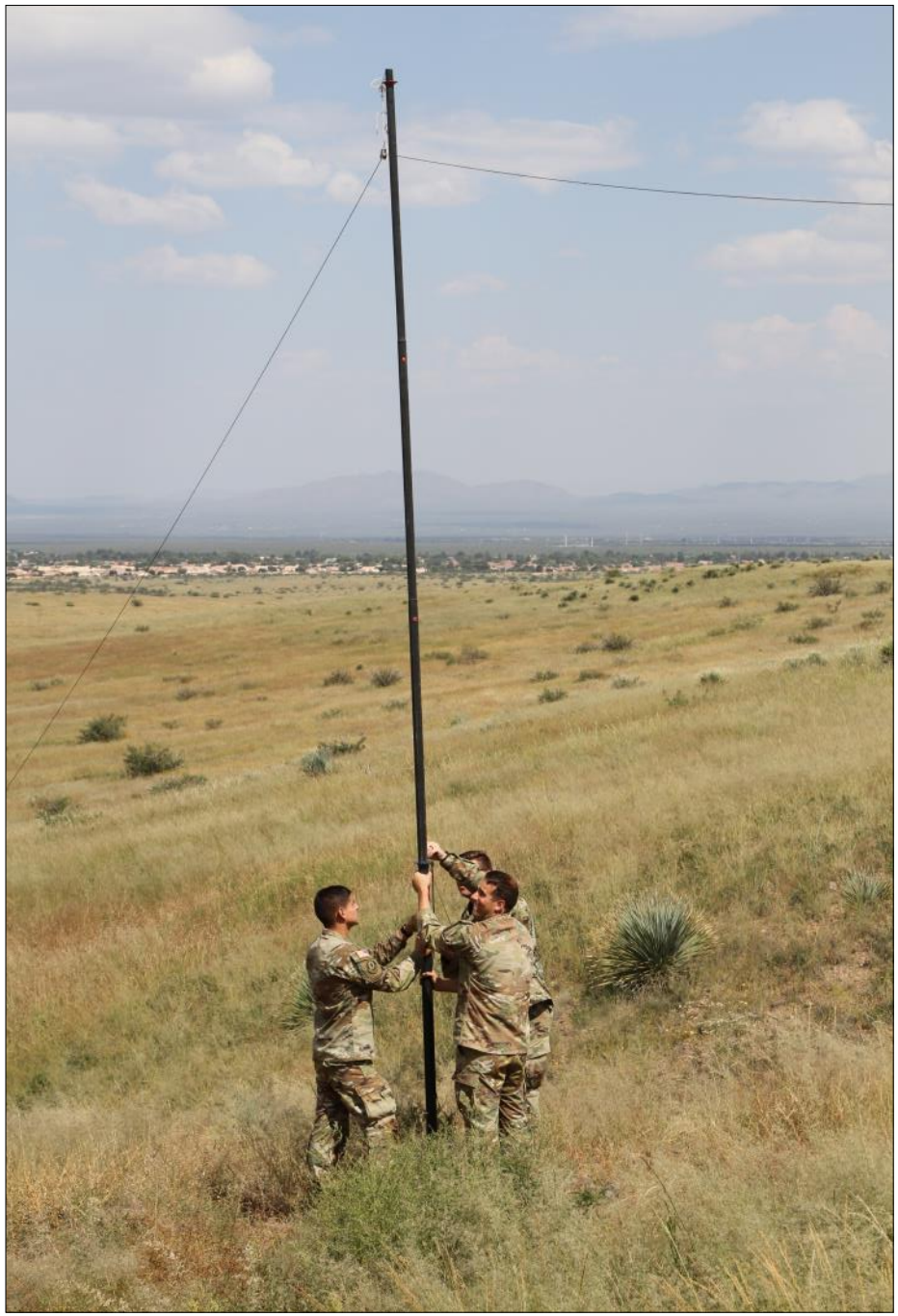
With a global demand for HF applications, along with a military and civilian necessity to exercise communications connectivity during crisis and critical military operations, services are recognizing the need to get personnel trained and proficient in using HF communications. NETCOM is actively working with mission partners to meet training requests.

In the spring of 2019, NETCOM designed technical HF assistance labs at Fort Huachuca, Arizona as a proof-of-concept. By summer, the command was running more than a dozen labs with units from around the globe; participants hailed from Europe, Alaska, Hawaii and all-around the Continental United States.

NETCOM's HF technical assistance labs provide training on a variety of HF subject areas, tailored to the attending unit's mission needs and training shortfalls.



David McGinnis (left), NETCOM HF Contractor, teaches a group of Signal Support Systems Specialists assigned to the 4th Security Force Assistance Brigade (4SFAB) based at Fort Carson Colorado, to set up a field-expedient HF antenna array within the confines of the Fort Huachuca, training area. Photo by Gordon Van Vleet



"No two labs are the same," English said.

The labs last typically three days in duration, Tuesday through Thursday, with travel days on Monday and Friday.

"The labs are all hands on," English said. "No death-by-PowerPoint slides."

Lab participants are given a communications problem to solve based on their unit's mission. When a unit is scheduled for a deployment, lab instructors work with them to develop a communications plan they can use while down range.

The training offered by HF NETCOM is not for the novice at heart, English said.

"The lab is not an HF 101 course," English said. "We expect personnel to have a basic understanding of HF communications and we build on that."

Long range, infrastructure free voice and digital communications are the primary applications used in the labs. Unit personnel must have a basic understanding of HF communications and how to operate the Harris HF radio.

"We want the attendees to take away an increased confidence in their ability to plan and execute a successful HF communications plan," English said. "Thus, one main takeaway ought to entail that they have a more thorough understanding of how to program their radios. They should also leave with a more in-depth understanding of how HF signal propagate."

Ultimately, lab participants take with them a better understanding of how HF antennas work and how to reconfigure their antennas to improve communications. They also leave with an understanding of how to fashion a field expedient antenna using commonly available materials."

According to participant reviews, the HF training far exceeds expectations and offers real-world applications and scenarios.

"The training we conducted over the past summer has been beneficial," said Army Sgt. Jeremy Reynolds, Signal Support Systems Specialist with the 4th Security Force Assistance Brigade (4SFAB) based

Left: Three Signal Support Systems Specialists assigned to the 4th Security Force Assistance Brigade (4SFAB) based at Fort Carson Colorado make final adjustments as they set up a field-expedient HF antenna array within the confines of the Fort Huachuca, training area.
Photo by Gordon Van Vleet

at Fort Carson Colorado.
“NETCOM trained us both on the best- and worst-case scenarios. It was realistic in the aspect of what resources we could use to make an antenna and how effective it can be in real world situations.”

Reynolds’ team learned about the resource practicality needed to build a remote HF antenna in any location around the world.

“The ability to purchase components from a hardware store and construct a simple antenna to communicate from Fort Huachuca to Texas makes Soldiers that more effective on mission,” Reynolds said. “I think any unit needing more knowledge on HF equipment should send personnel to get this training.”

Army Staff Sgt. Carlos Lopez, Signal Support Systems Specialist, 4SFAB, echoed Reynolds’ sentiments.

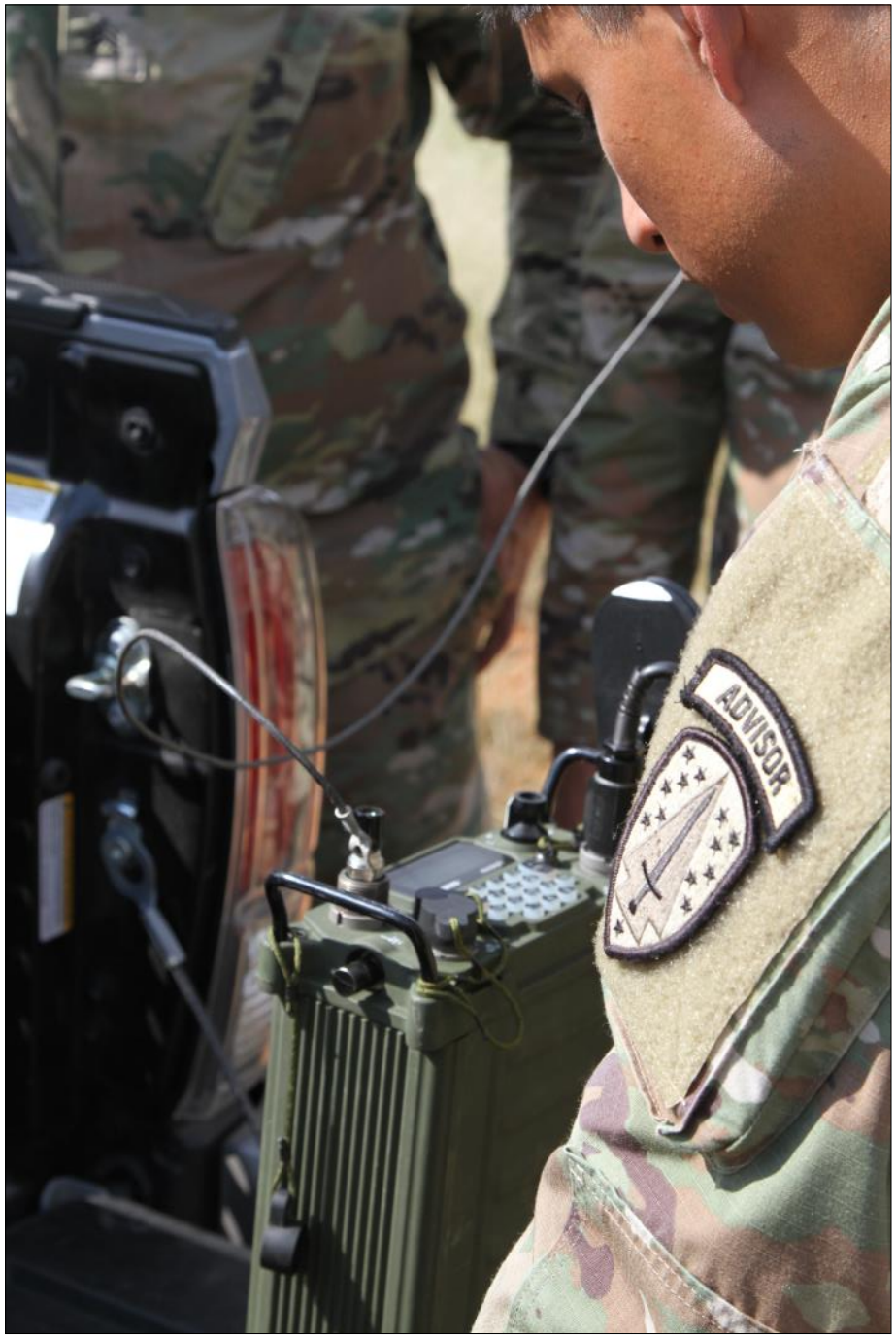
“The HF training provided by NETCOM has been the best HF training I have received in the nine years I’ve served in the Army,” Lopez said. “The focus was on what we as users needed help with. They didn’t teach unnecessary things and they focused on how we can implement this training back into our units.”

“I personally think that any unit can benefit from this training,” Lopez said. “NETCOM doesn’t just teach how to operate a radio, but more importantly, they teach how to understand what can cause interference, what frequencies are best depending on the time of day, and so much more.”

“SFAB teams tend to deploy or train in small groups of 12 people normally away from the higher headquarters,” Lopez said. “Having the ability to communicate in a secure matter at long distances will enhance our unit’s signal mission.”

English said that through these HF training labs, NETCOM strives to give students a holistic and thoughtful problem-solving skillset that allows them to find solutions to long-range communications challenges.

“By the end of each lab, it is NETCOM’s goal to have assisted the unit with improving their understanding of HF communications and to have offered some tactics, techniques, and procedures that will help them accomplish any mission,” English said.



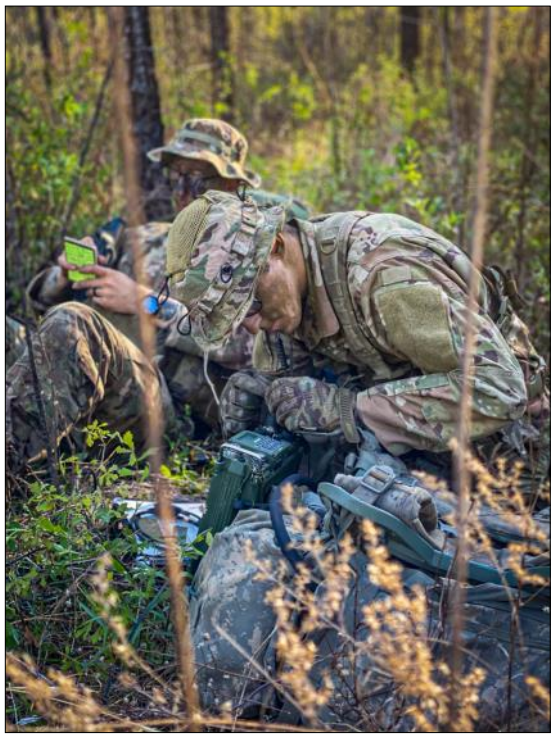
(Right): Staff Sgt. Carlos Lopez, Signal Support Systems Specialist assigned to the 4SFAB based at Fort Carson Colorado, checks the frequencies on a portable HF radio set as he prepares to transmit via a field-expedient antenna array within the confines of the Fort Huachuca, training area.
Photo by Gordon Van Vleet

Teaching tactical communications for tomorrow's fight

Capt. Joseph Jarrells
RSLC Communications OIC

The Reconnaissance and Surveillance Leaders Course (RSLC) is a 26-day United States Army Infantry School (USAIS) Program of Instruction (POI) conducted by the Airborne and Ranger Training Brigade (ARTB) at Fort Benning, Georgia. The purpose of the course is to increase the tactical proficiency of dismounted elements in order to better execute reconnaissance and surveillance (R&S) operations in any operational environment, under any conditions. The course focuses on grades E-5 to E-7 and O-1 to O3, and is open to members of all military services.

During the course, students learn and practice, repetitively, the fundamentals of dismounted reconnaissance, surveillance, and target acquisition. They depart with enhanced proficiency in these fundamentals and an understanding of constantly evolving tactics, techniques and procedures (TTPs) to improve their organization's lethality and effectiveness. RSLC-trained leaders are essential to assisting operational force commanders close capability gaps and maintain situational understanding as our Army boldly transitions to meet emerging challenges in a Large Scale Combat Operations (LSCO) environment. The course design aligns with Army transformation efforts and ensures students master understanding, analyzing and communicating critical information in a timely and accurate manner. In so doing, the course places emphasis on teaching and training the versatility and reliability of using High Frequency (HF) radio communication systems, operating with a comparatively small Radio Frequency (RF) signature and consistency within a disrupted, degraded, and denied environment. RSLC's focus on reconnaissance, surveillance, and HF communications enables graduates to return to their units and effectively build disciplined, lethal, adaptable teams who exercise stealth during operations and enable commanders' decision dominance.



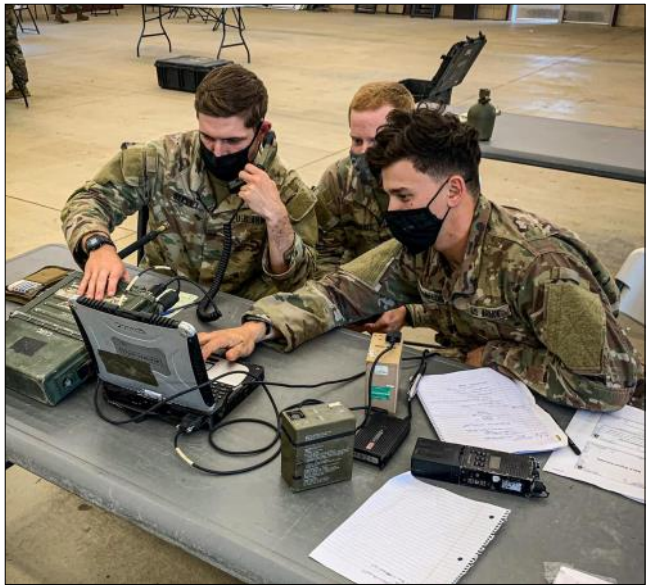
RSLC students train to assist future commanders with decision dominance. (Courtesy photo)

Small unit reconnaissance and surveillance operations are inherently risky. Commanders analyze and weigh the opportunity cost of deploying a reconnaissance team, with minimal security, behind enemy lines to collect valuable critical information. RSLC-trained leaders assist the commander greatly in their decision dominance through conceptual understanding of the mission, a deliberate and nested training glide path, and disciplined practice and execution. Over the past two decades of persistent combat operations, our military strength and technological advancements have provided a relatively secure environment. An example of this is our collective heavy reliance on satellite-based communications and navigation equipment. These systems allow for rapid and reliable transmissions and immediate situational awareness, however, come at the cost of a large RF signature – one that is easily detected and significantly increases the risk to the mission and force when fighting against a peer or near-peer adversary.

Moreover, reconnaissance and surveillance (R&S) teams must be able to effectively operate within a disrupted, degraded, and denied environment. Great Power Competition brings various complex operational challenges from a more advanced and better prepared enemy that will target our cutting-edge technology. The ability to disrupt U.S. military communication systems is easily achieved by our enemy's technological advancements, and the widespread availability of commercial and military-grade jamming equipment further exacerbates the challenges. Trained, disciplined, adaptable R&S teams, with reliable communications mediums, are pivotal in future operating environments to relay collected information, without compromise.

The use of HF systems is the means to ensure R&S teams are successful. These systems facilitate Beyond-Line-Of-Sight (BLOS) transmissions at virtually unlimited distances, while maintaining a small signature and remaining versatile to operate in a disrupted, degraded, and denied environment. BLOS transmission enables dismounted R&S teams to operate 10-15 kilometers from their support, and beyond where line-of-sight systems fail due to effective range limitations and obstacles. Likewise, HF systems function with a significantly smaller RF signature as a result of operating on the lower end of the frequency spectrum, coupled with the ability to adjust the type and directionality of the antenna. Versatility in antenna configurations helps to counteract the effects of a disrupted, degraded, and denied environment by allowing the user to adjust the directionality and power of signal transmission, focusing the RF energy towards the intended receiver vice a broad area for anyone or anything near to intercept.

HF communications is the primary transmission method RSLC teaches as a way to securely communicate collected information to higher headquarters. We liken the dependency on HF without a full technical understanding to a Soldier's proficiency on basic land navigation using a map and compass. Although today's Soldier have the ability to use Global Positioning Systems (GPS) paired with situational awareness systems to pinpoint their exact location, the need to understand and retain the knowledge of using an analog map and compass will remain relevant. Moreover, dependency on technology without a solid understanding of how that technology works or its effects against the enemy's systems or our own is a poor and potentially deadly way to fight survive, and win.



RSLC students gain proficiency on HF platforms to securely communicate reconnaissance information. (Courtesy photo)

This principle is no different when applied to communications systems, especially when planning to operate within a disrupted, degraded, or denied environment – hence, why many tactical operation centers (TOCs) now use both analog and digital methods as a fail-safe. RSLC communications instructors are well-trained and provide students a foundational understanding of HF systems, its use, and advantages/disadvantages. Course instruction begins with equipment characteristics, capabilities and general operation, then evolves into how to use the system's computer programming application to competently program the radio systems, along with legacy programs such as the radio program application.

We see the application of HF as part science, and part art. Like land navigation, the art of HF implementation is a perishable skill. Knowledge and understanding of the art of HF implementation has largely gone untrained during the counter-insurgency fight, due to the generally uninhibited use of more advanced forms of communication. When considering the future LSCO environment, the use of more advanced forms of communication are targeted by our enemy, or its implementation is not practical due to the signature created. RSLC continues to adapt its HF communications instruction beyond the science to balance with the art of field-craft and real-world implementation. RSLC communication instructors teach students about the types and how to build field expedient antennas to aid in reducing their RF signature. Students learn the principles of radio wave propagation, which highlights the usefulness of antenna directionality and how signal strength can increase in one direction while reducing RF signature in the other. Instruction also highlights how the environment (terrain, weather, time of day) affects HF transmission and how an R&S team can best counteract or use the environment to their advantage.

The efficacy of the Beyond-Line-Of-Sight communication method which produces a small, directional RF signature cannot be overstated when applied to the mission of dismounted reconnaissance and surveillance. The science behind HF communication is established and reliable. The art and practical knowledge, however has slowly attrited over the last two decades. RSLC is attributed with keeping the operational knowledge and the art of HF communications alive for a small population within our Army. As our Army and the Joint Force prepares for LSCO against peer and near-peer adversaries, the utility of small, dismounted R&S teams and the use of HF communications will be critical. The existence of RSLC and its adaptive practices is hugely important during this time in our Army to create balance between technological advancements, enhancing human capability, and employing simple, reliable methods to prevail in the next fight. RSLC remains the premier training institution for dismounted R&S operations, and the Army's only functional school that teaches in-depth instruction on the operation and implementation of HF communications.

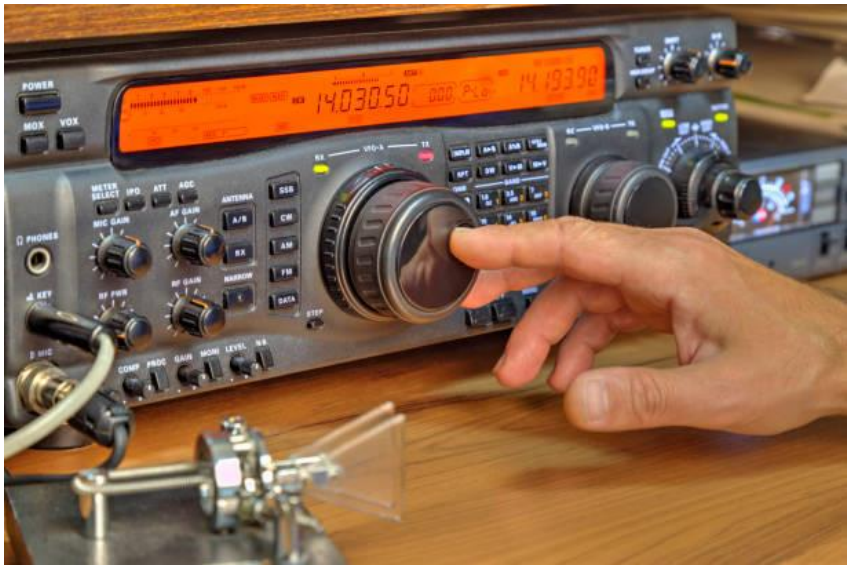
Why Become a Ham radio operator?

Master Sgt. Jean C. Burgos,
10th Mountain Division, Combat Aviation Brigade

Amateur radio is the most powerful communications service available to private citizens anywhere on Earth. Amateur Radio is a recognized national asset, providing trained operators, technical specialists, and disaster response communications in time of need. Amateur Radio Operators are licensed to operate in various bands (groups of non-military frequencies) capable of communicating within your local area, county, or across the world. Some specific bands allow you to talk with astronauts on the international space station.

Amateur Radio Operators find interest in the technology used to communicate worldwide, the science behind propagation, or basic electronics and soldering; while others like competitive events such as Parks On The Air (POTA) or Summit On The Air (SOTA) and award programs. Groups of Amateur Radio Operators participate in DXpedition, also known as Fox and Hound competitions. These competitors search for hidden transmitters, mixing software, hardware, and techniques to find them. Some Amateur Radio Operators become licensed so they can support emergency response efforts through established groups such as Amateur Radio Emergency Service® (ARES), Radio Amateur Civil Emergency Service (RACES), and Army Military Auxiliary Radio System (MARS).

Whatever the reason for becoming an Amateur Radio Operators, "Ham Radio Operators" have kept radio communications alive, establishing communities of well-represented and dedicated people from all over the globe sharing the same passion.



(Courtesy photo)

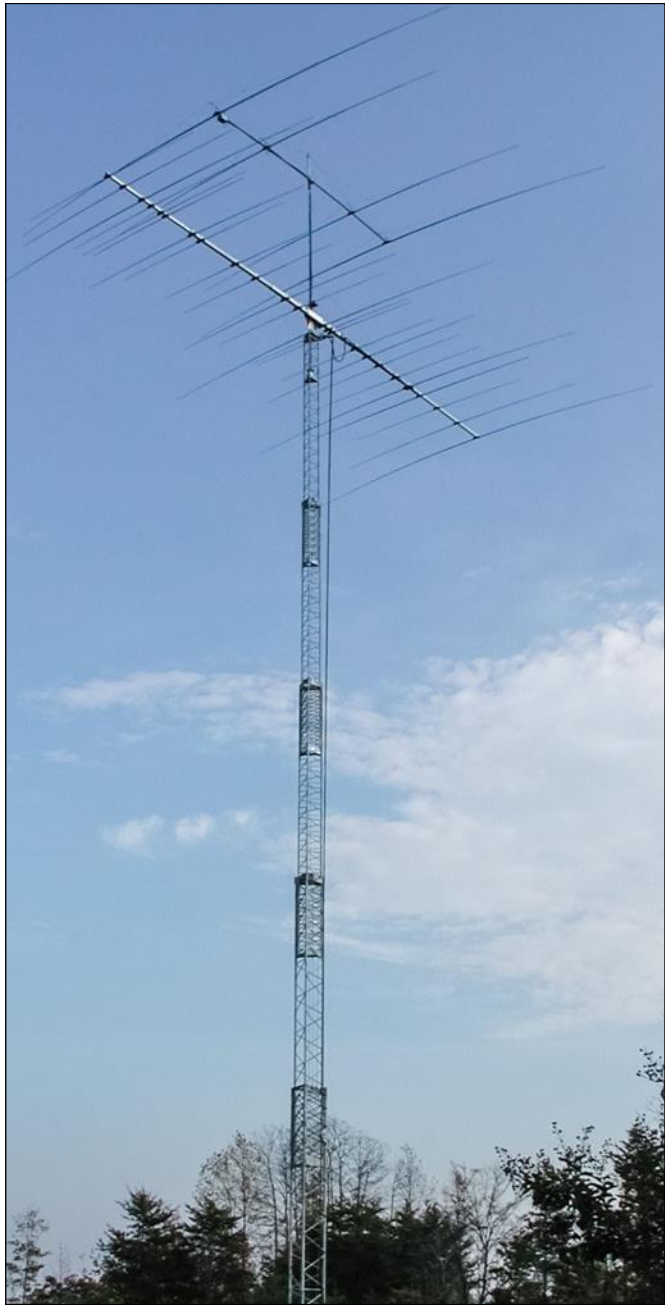
Ham Radios can be large stations with equipment worth tens of thousands of dollars, mobile units in vehicles, dismounted units, or handhelds for adventures.

Ham Radio Operators' typically range from six years of age to more than one hundred years old. Ham Radio Operators love to train and mentor newcomers to learn how to become better amateurs together. These mentors are called Elmers, but you will have to read the Ham Radio Technician License manual to understand where this name comes from. Ham Radio and Citizen's Band (CB) Radio occupy only one band on the frequency spectrum with 40 channels capable of reaching nearly 10 miles and intended for business and private use. Using Ham Radio bands is a privilege, and as such, it is regulated to maintain the integrity of services that can reach around the globe without repeaters. Ham Radio bands, along with other bands, are used during emergencies.

So why should you become a Ham Radio Operator? Here's a quick breakdown:

• Participation with emergency communications and preparedness with government agencies such as the Federal Emergency Management Agency (FEMA) and the Department of Homeland Security DHS.
• Learn available equipment and how to operate it
• Build and repair electronic equipment, electrical principles, components, and antennas
• Become licensed on different radio bands with various applications and radio waves
• Learn the proper etiquette, procedures, safety, and FCC rules for using Ham radios
• Become part of the volunteer force for local emergency preparedness groups such as Amateur Radio Emergency Service® (ARES), Radio Amateur Civil Emergency Service (RACES), and Army Military Auxiliary Radio System (MARS).
• Participate in DOD, MARS, and International radio competitions
• Amateur Radio-Public Safety Communications Drill Video
• Army Military Auxiliary Radio Service (MARS) Video
• As a Signal Soldier, you have been around radios for a while. Becoming a Ham Operator will only improve your skills as a Signal Soldier on Very High Frequency (VHF), Ultra High Frequency (UHF), and most importantly on High Frequency (HF).
• Empower your units with available beyond the line of sight capabilities through efficiency and proficiency
• Passing the Technician License will give you ten promotion points.
• Passing the General License will give you ten promotion points.
• Did I mention that you will get promotion points?

Technician, General, and Extra are the three different exams that provide access to various bands and features. There is a plethora of free practice exams online to prepare you for the $15, 35 question exam, You can take the exam in person or online with volunteer examiners. The American Radio Relay League (ARRL) is an excellent place to find study materials and information about testing (membership is not required for this purpose). After successfully passing your examination, you will be granted your Call Sign that is good for ten years. Hams typically have local clubs where you can find more information.



(Courtesy photo)

JRTC provides opportunities to train the next generation of Signaleers

Nick Spinelli
Office Chief of Signal

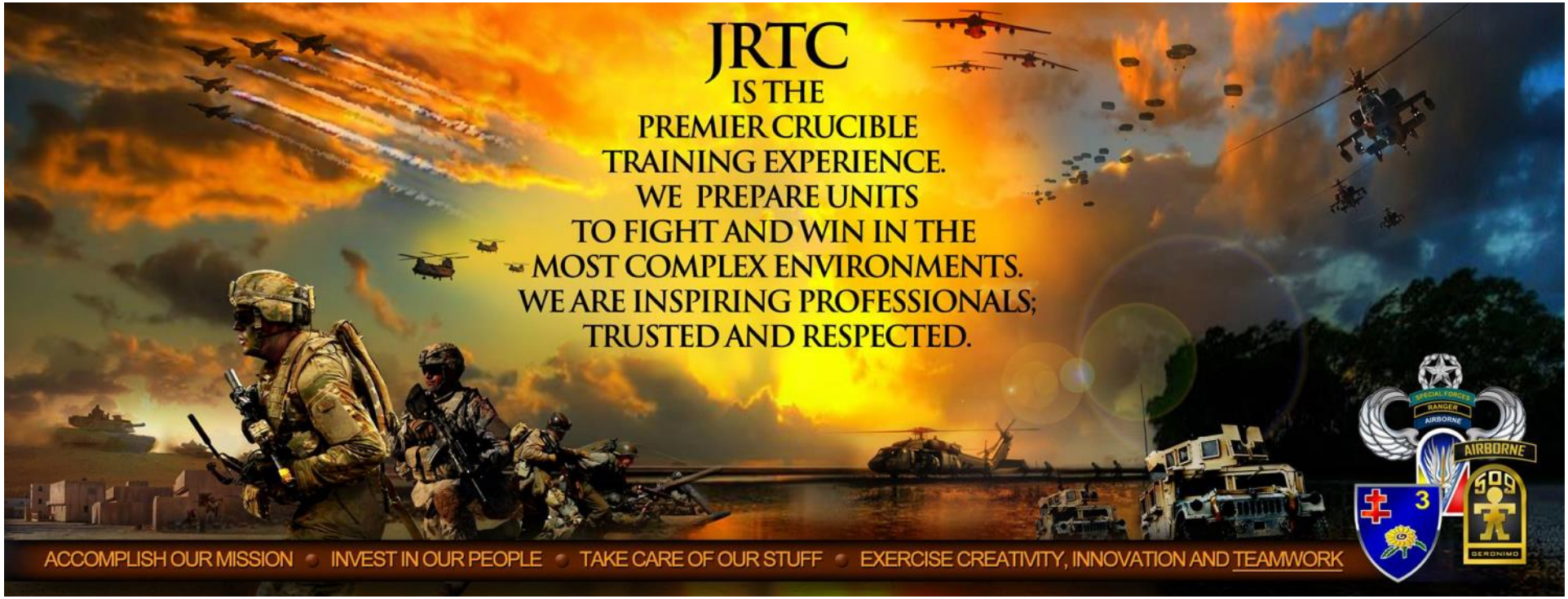
There are many career opportunities of Signaleers throughout the Army, but one of the most challenging and rewarding may be an assignment with the Joint Readiness Training Center (JRTC) on Fort Polk, La.

With its mission of ""Forging the Warrior Spirit," JRTC provides Soldiers from all occupational specialties training in a variety of different "real-world" based scenarios, preparing them for any number of potential conflicts and battleground situations. According to rig. Gen. David Scott Doyle, Fort Polk and JRTC Commanding General, Signal plays a key role in the development and implementation of all training.

"You cannot command units unless you can communicate, which is why communications and the strategy of developing them is essential to all that we do here," he said. "We are dependent on Signal and Cyber Soldiers to enable all the other capabilities our Army brings to bear."

In order to ensure the value in all of its training, the JRTC presents scenarios based on the latest capabilities of potential adversaries.

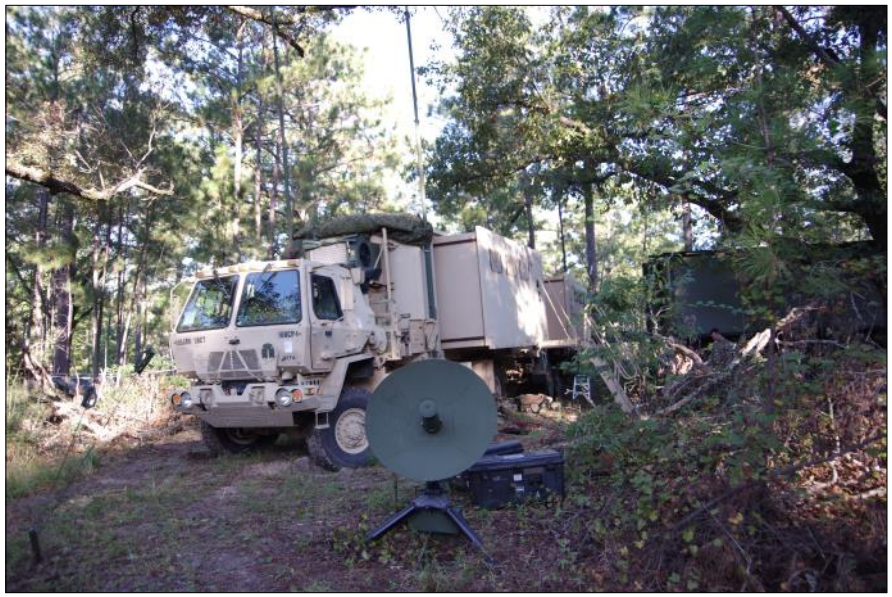
"Training is based on capabilities and Ensuring units are exposed to the possibility of a technique tactic or capability," Doyle said. "Our biggest challenge is to try to predict future combat, and Signal is a portion of that fight."



Graphic courtesy of Joint Readiness Training Center Operations Group

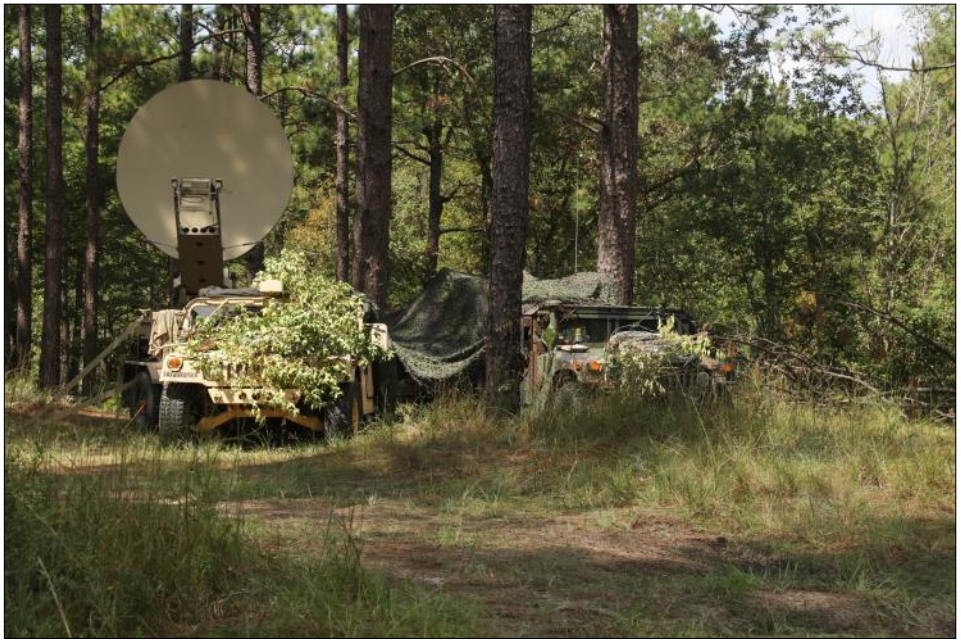
Signaleers assigned to the JRTC utilize their knowledge and experience to ensure communications in training scenarios are on par with what Soldiers will utilize in actual combat. Additionally, they work to ensure the communication mission works in conjunction with other areas of training, with the ultimate goal being the total integration of specializations.

Soldiers of the 3/101 IN employ an FM retransmission site on Berry Drop Zone, JRTC. (Courtesy photo)



3/101 IN assess added mobility with addition of the Mission Command Platform as part of the Command Post Integrated Infrastructure. (Courtesy photo)

"All the technological knowledge in the world is worthless if it's not deployed properly. We take specialization to the next level where it has to cooperate and work in conjunction with other systems and capabilities," Doyle said.



2/506th IN TOC use a satellite tactical terminal from a concealed position during their D.A.T.E. rotation at Fort Polk, LA. (Courtesy photo)

While the JRTC mission began in 1987, the current site on Fort Polk was established in 1993 and quickly became the premiere training site, offering a variety of settings and mock environments to simulate real-world battlefields. Additionally, JRTC employs training role-players as journalists, local citizens, elected officials, and religious leaders.

"We have resources and tools not found elsewhere because the Army has invested so much in our infrastructure," Doyle explained.

For more information on an assignment with JRTC, contact your branch manager.

New Signal Brigade activates at JBLM

Capt. George Wasickanin
22d Corps Signal Brigade, PAO

America's First Corps hosted an activation ceremony for the 22d Corps Signal Brigade at Joint Base Lewis-McChord, Nov. 22, 2021.

Lt. Gen. Xavier T. Brunson, I Corps commander, presided over the ceremony as Col. Charles D. Smith and Command Sgt. Maj. Lisa M. Gandy unfurled their unit colors and assumed command and responsibility.

"22d Corps Signal Brigade is going to provide the Corps and our Army with great cyber security and upper TI (tactical internet) capability," said Lt. Gen. Brunson. "This brigade will make us better and more ready for our mission."

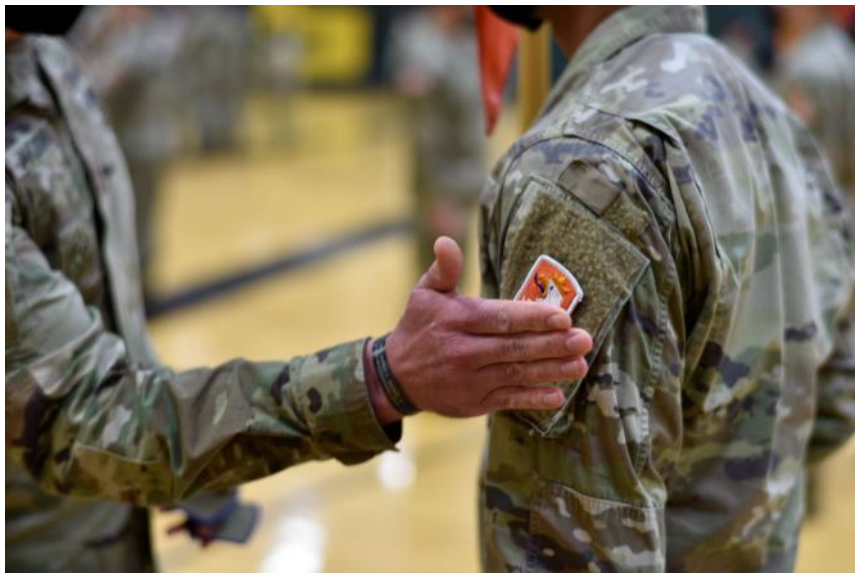
Comprised of over 690 Soldiers, 22d Corps Signal Brigade is assigned to United States Army Forces Command and aligned to I Corps. The brigade will have the ability to command and control up to five Expeditionary Signal Battalions (ESB) and any attached forces required to meet the network support missions.

The activation ceremony included a special re-patching segment as the 51st Expeditionary Signal Battalion reorganized as a subordinate unit under the new brigade. The battalion was previously aligned under the 35th Signal Brigade, Fort Bragg, N.C.

22d Corps Signal Brigade will execute global missions, with concentration in the Pacific theater. There will be three Corps Signal Brigades, 11th, 22d and 35th in the U.S. Army. The units were created to fill network operation shortfalls, modernize the signal regiment and further enable mission command at the Corps level.

"The Eagle Brigade will achieve its mission of providing expeditionary signal capabilities (for I Corps and subordinate units), executing command and control of assigned and attached forces to engineer, install, operate, maintain, and defend the unified network to provide decision dominance for the commander at the point of need," said Col. Smith.

At this time the 22d Corps Signal Brigade is establishing a Network Operations and Cybersecurity Center (NOCC). The NOCC is a 24-hour network management, command and control node, monitoring tactical and strategic links supporting United States Army Forces in field training exercises and deployments globally.



22d Corps Signal Brigade conducted an activation ceremony November 22d, 2021. The brigade, comprised of approximately 600 Soldiers is aligned with I Corps. Photo by Capt. George Wasickanin

The brigade was constituted as Headquarters and Headquarters Company, 22nd Signal Service Group on Nov. 14, 1945, in Mannheim, Germany. This is the fourth time the unit has activated in its 76-year history. The unit's last inactivation occurred on May 22, 2007, the 22nd Signal Brigade colors were furled in Darmstadt, Germany.

The unit took part in five campaigns to include the Korean War where the brigade was awarded the Meritorious Unit Commendation and Streamer, Operation Desert Storm, Balkan Wars and twice in support of Operation Iraqi Freedom.

Joint Assault Signal Companies in World War II

Steven J. Rauch
Signal Corps Branch Historian

When the US Army began to confront the many organizational, training, and material challenges during the first years of World War II, the most difficult was the conduct of amphibious operations – assaulting enemy held territory from the sea. Though often believed to be the realm of the Marine Corps and Navy, in fact, the Army conducted more amphibious assaults than the other services due to the preponderance of forces. At the division level where execution of this task was accomplished, the Marine Corps employed only six divisions in the theater whereas the Army provided 21 divisions for the Pacific campaign. An example was the Luzon campaign during February 1945 when the Eighth Army conducted more than 50 amphibious assaults to recapture the southern Philippines.

In 1941, the Army intended for the standard infantry division Signal Company to provide communications during beachhead operations. During the summer of 1942, the army created the Engineer Special Brigade to handle many of the complex challenges during a landing to include clearing and modifying the terrain as needed. It also became apparent that a special signal organization was needed to link communications between adjacent beaches and between assault forces and the ships at sea. For this mission the army organized a non-divisional Signal Company (Special), which was intended to join with Army Air Force and Navy communications personnel to establish a central communications center on the assaulted beach.

Newly assembled Soldiers, sailors, and airmen of the Joint Assault Signal Company pose for a photo; circa 1944. (Courtesy photo)

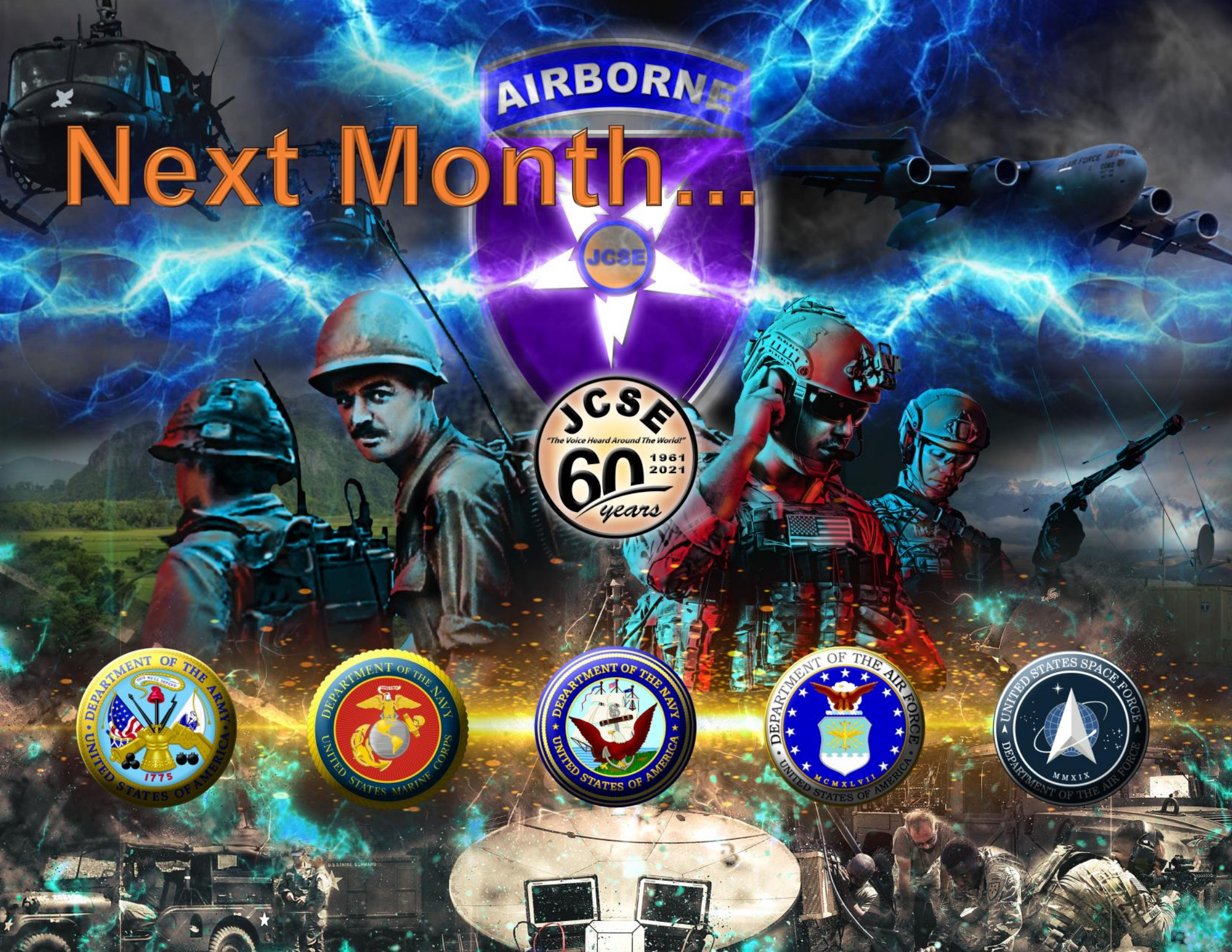
During late 1943, the Joint Staff directed formation of a more permanent organization to improve communications between land, sea, and air forces during amphibious operations. The Joint Assault Signal Company, or JASCO, was created by adding naval shore fire control and Army Air Force air liaison parties – which were too small to be independent units – to the Army signal company. A Signal Corps major commanded a JASCO because it was much larger than a normal signal company, with an authorized strength of between 500 and 600 Army, Navy and Army Air Force personnel. The JASCO's purpose was to implement common communications procedures to enable all services to effectively communicate during an amphibious assault. These included joint radio frequencies, joint message transmission procedures, joint coordination for close air support, and control of naval gunfire against shore targets. The JASCO did not function as an integral unit during operations. During an amphibious landing, the various JASCO teams would be attached to the appropriate units needing support. Nine battalion shore and beach party communications teams provided radio and wire links between the assaulting battalions and their shore parties, supply dumps, and evacuation stations. Each team consisted of a Signal officer, 19 army enlisted men (radio and wire) and 10 Navy enlisted men (visual and radio) to provide communications during the initial phases of an amphibious assault. In addition air liaison teams, (consisting of one officer and three enlisted men, all members of the Army Air Force), would be attached to battalion and regimental

headquarters. Naval shore fire control teams (two officers and five enlisted men) would be attached to each battalion landing team (the combat battalion and its support units). Once the situation stabilized and command and control established for sustained ground operations, the JASCO teams would be recalled and evacuated to prepare for the next amphibious operation.

During World War II, eleven Army JASCOs were created to serve in the European Theater, Central Pacific, and Southwest Pacific theaters of operations. Three JASCOs operated during the landings on the Normandy beaches in June 1944. A platoon from the 294th JASCO provided the only communications available on Omaha Beach until noon, when other communications units were able to begin operations. At Kwajalein Atoll in the Pacific, a JASCO attached to the 4th Marine Division improved artillery, air, and naval coordination largely. On Iwo Jima, artillery, naval, and air, coordination was described as superb due to the JASCO. On hotly contested beaches, such as those on Saipan, JASCO casualties were often very high, mainly because the men focused on their communications missions instead of providing for their own protection.

Later in the war there was some consideration based upon operational experience to create a battalion size organization. This concept was to have a line company composed of the Air Liaison, Naval Gunfire Support, and Beach Party communications teams to support each Regimental Combat Team of the division. By enlarging the joint assets to a battalion, a single JASCO would support a regiment rather than a whole division. There would also be a Headquarters and Headquarters Company for the administration, command, and control of the battalion. However, with the impending end of the war, this idea never materialized into reality.

Wherever JASCOs were employed, their signalers reduced the congestion of radio circuits and provided dependable communications for air-ground-sea operations. Following the war, most of the JASCOs were inactivated or reorganized to perform other signal missions. They were eventually replaced by the air and naval gunfire liaison companies (ANGLICOs) of the Marine Corps. This innovative and forward thinking joint unit, the Signal Corps JASCO, proved indispensable for linking air, ground and naval communications during the complex multi-domain operations during World War II.


Next Month...
AIRBORNE
JCSE
JCSE
"The Voice Heard Around The World!"
60 years
1961
2021
DEPARTMENT OF THE ARMY
UNITED STATES OF AMERICA
1775
DEPARTMENT OF THE NAVY
UNITED STATES MARINE CORPS
DEPARTMENT OF THE NAVY
UNITED STATES OF AMERICA
DEPARTMENT OF THE AIR FORCE
UNITED STATES OF AMERICA
MCMXLVII
UNITED STATES SPACE FORCE
DEPARTMENT OF THE AIR FORCE
MMXIX